SECTION 3

Technical Approach and Investigation Procedures

As described in Section 2, the Phase I RFI will include the collection and analysis of environmental samples at five SWMUs and one AOC as listed below:

- SWMU 1 – Camp Garcia Landfill
- SWMU 2 – Fuels Off-Loading Site (Camp Garcia)
- SWMU 5 – Spent Battery Accumulation Area (OP-1, Inner Range, AFWTF)
- SWMU 8 – Waste Oil Accumulation Area (OP-1, Inner Range, AFWTF)
- SWMU 10 – Sewage Treatment Lagoons (Camp Garcia)
- SWMU 12 – Solid Waste Collection Unit Area (OP-1, Inner Range, AFWTF)
- AOC-G – Pump Station and Chlorinating Building at Sewage Lagoons (Camp Garcia)

No field sampling is proposed for SWMU 4 (Waste Areas of Building 303, Camp Garcia); SWMU 6 (Waste Oil and Paint Accumulation Area, Seabees Area, Camp Garcia); SWMU 7 (Waste Oil Accumulation Area, outside Building 303, Camp Garcia); AOC A (Diesel Fuel Fill Pipe Area, OP-1, Inner Range, AFWTF); and AOC F (Rock Quarry, Camp Garcia) because previous soil sampling conducted at these sites did not indicate the presence of significant contamination at these sites. The Phase I RFI Report will, however, present the risk-based screening results for the June 2000 sampling event for these sites.

This section details the technical approach developed to perform the proposed Phase I RFI sampling activities. The goal of the sampling effort is to collect representative soil and groundwater samples at the sites listed above, and to make a recommendation for additional action or no further action (NFA) for each site based on the data interpretation. A review of the available analytical data collected during previous investigations was performed, and sampling locations were selected based on this review and on observations made during the CH2M HILL February 2000 site visit.

The tasks included in the technical approach are listed below. The remainder of this section provides detailed discussions of the investigation procedures.

- Task 1: Project Planning
- Task 2: Field Investigation
- Task 3: Sample Analysis and Validation
- Task 4: Data Evaluation
- Task 5: Investigation Reports

3.1 Task 1: Project Planning

This task consists of the preparation of Project Plans associated with the Phase I RFI.

3.1.1 Work Plan

The Master Work Plan for AFWTF (CH2M HILL, February 2001) will be used for guidance on the activities to be performed at each site for this investigation. The Master Work Plan includes the Master Project Plan, Master Sampling and Analysis Plan (SAP), and Master Health and Safety Plan (HASP). The Master SAP consists of three documents: the Master Field Sampling Plan (FSP), the Master Quality Assurance Project Plan (QAPP), and the Master Investigation-Derived Waste Management Plan (IDWMP). The Master Plans provide the approach to be used for investigations, and general types of activities to be accomplished.

This site-specific work plan supplements the Master Plan and presents site-specific information for each SWMU and AOC where sampling activities are proposed. The HASP, FSP, QAPP, and IDWMP are presented as checklists of items based on the existing Master Work Plans (including other supporting documentation, and additions or deviations from the Master Plan), and are submitted within this document, as Appendix B.

3.1.2 Meetings

During the course of the investigations and report development, meetings will be held to discuss the proposed project schedule and findings with Atlantic Division (LANTDIV), PREQB, EPA, and NSRR. CH2M HILL will provide minutes of the meetings to LANTDIV and NSRR. One site visit was performed during work plan preparation.

3.1.3 Project Management

The activities involved in project management include daily technical support and guidance, budget and schedule review and tracking, preparation and review of invoices, personnel resources planning and allocation, subcontractor coordination, preparation of monthly progress reports, and communication and coordination of events with LANTDIV, PREQB, EPA, and NSRR.

3.2 Field Investigation

This task involves efforts related to fieldwork support, the field investigation, and surveying.

3.2.1 Fieldwork Support

Fieldwork support includes subcontractor procurement, mobilization, and utility clearance, as described in the following subsections.

3.2.1.1 Subcontractor Procurement

As part of the initial field mobilization to the EMA and AFWTF, CH2M HILL will procure analytical laboratory and data validation services for work at the facility. The subcontracted analytical laboratory will meet EPA Level D quality control.

3.2.1.2 Mobilization/Demobilization

Mobilization includes procurement of necessary field equipment, and initial transport to the site. Equipment and supplies will be brought to the site when the CH2M HILL field team mobilizes for field activities.

Demobilization activities include time for IDW sampling and general site restoration prior to the return transport of field equipment and crew. IDW generated during field activities will be containerized in 55-gallon drums. Equipment decontamination fluids will be containerized in 55-gallon drums for storage. The 55-gallon drums will be properly labeled and stored at a location designated by LANTDIV prior to disposal.

It is anticipated that the IDW generated will be disposed of as non-hazardous waste.

3.2.2 Field Sampling Activities

The goal of the sampling effort is to collect representative data at selected sites in the EMA and AFWTF and determine if either a full RFI investigation or NFA is necessary at each of the sites. A description of these activities with supporting rationale was provided in Section 2. The number of samples to be collected from each medium of concern at each unit is summarized in Table 3-1.

3.2.3 Soil Sampling Procedures

Table 3-2 presents the required containers, preservatives, and holding times for surface soil and subsurface soil samples.

3.2.3.1 Soil Sampling Techniques

The investigation involves the collection of both surface and subsurface soil samples. The applicable Standard Operating Procedures (SOPs) for the collection of soil samples from the AFWTF Master Project Plan (February 2001) are included with the FSP checklist located in Appendix B of this Work Plan.

3.2.4 Groundwater Sampling Procedures

Table 3-3 presents the required containers, preservatives, and holding times for groundwater samples.

3.2.4.1 Groundwater Sampling Techniques

The investigation involves the collection of groundwater samples. The applicable SOPs for the collection of soil samples from the AFWTF Master Project Plan (February 2001) are included with the FSP checklist located in Appendix B of this Work Plan.

TABLE 3-1
Proposed Sampling, RCRA Facility Investigation, Camp Garcia – February 2001

Parameters[1]	SWMU 1	SWMU 2	SWMU 4	SWMU 5	SWMU 8	SWMU 10	SWMU 12	AOC G	QA/QC
Surface Soil Samples									
Appendix IX VOCs	50	12	NA	4	5	16	5	5	28
Appendix IX SVOCs	50	12	NA	4	5	16	5	5	18
Appendix IX Metals	50	12	NA	4	5	16	5	5	18
Appendix IX Herbicides	50	12	NA	4	5	16	5	5	18
Appendix IX Pesticides/PCBs	50	12	NA	4	5	16	5	5	18
Explosives	50	12	NA	4	5	16	5	5	18
Subsurface Soil Samples (at 5' Depth)									
Appendix IX VOCs	N/A	N/A	1	N/A	N/A	16	N/A	N/A	7
Appendix IX SVOCs	N/A	N/A	1	N/A	N/A	16	N/A	N/A	5
Appendix IX Metals	N/A	N/A	NA	N/A	N/A	16	N/A	N/A	5
Appendix IX Herbicides	N/A	N/A	NA	N/A	N/A	16	N/A	N/A	5
Appendix IX Pesticides/PCBs	N/A	N/A	NA	N/A	N/A	16	N/A	N/A	5
Explosives	N/A	N/A	NA	N/A	N/A	16	N/A	N/A	5
Groundwater Samples									
Appendix IX VOCs	5	N/A	NA	N/A	N/A	4	N/A	N/A	11
Appendix IX SVOCs	5	N/A	NA	N/A	N/A	4	N/A	N/A	7
Appendix IX Metals	5	N/A	NA	N/A	N/A	4	N/A	N/A	7
Appendix IX Herbicides	5	N/A	NA	N/A	N/A	4	N/A	N/A	7
Appendix IX Pesticides/PCBs	5	N/A	NA	N/A	N/A	4	N/A	N/A	7
Explosives	5	N/A	NA	N/A	N/A	4	N/A	N/A	7
Subsurface Soils (at 15' Depth)									
Appendix IX VOCs	NA	3	8 [2)]	NA	NA	NA	NA	NA	NA
Appendix IX SVOCs	NA	3	8	NA	NA	NA	NA	NA	NA
Appendix IX Metals	NA	NA	NA	NA	NA	NA	NA	NA	NA
Appendix IX Herbicides	NA	NA	NA	NA	NA	NA	NA	NA	NA
Appendix IX Pesticides/PCBs	NA	NA	NA	NA	NA	NA	NA	NA	NA
Explosives	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1)] refer to Table 8-2 of the Master QAPP for a detailed list of constituents.

[2)] Contingent on finding degreasing basin and dry wall

TABLE 3-2
Required Containers, Preservatives, and Holding Times for Soil and Sediment

Analysis	Analytical Preparation/ Method Number	No. of Containers	Sample Container	Preservative	Holding Time	Volume of Sample
Appendix IX VOCs	SW-846 Method 5035/8260B	3 to 4	3-4 each 5-g En Core™ sampler	4°C	48 hours to extraction and 14 days from extraction to analysis	Fill completely with no air bubbles
Appendix IX SVOCs	SW-846 Method 3550B/8270C	1	8-oz. Glass jar [1]	4°C	14 days to extraction and 40 days from extraction to analysis	Fill completely
Appendix IX PCBs	SW-846 Methods 3550B/8082	1	8-oz. Glass jar [1]	4°C	14 days to extraction and 40 days from extraction to analysis	Fill completely
Appendix IX Pesticides	SW-846 Method 3550B/8081A	1	8-oz. Glass jar [1]	4°C	14 days to extraction and 40 days from extraction to analysis	Fill completely
Appendix IX Herbicides	SW-846 Method 3550B/8051A	1	8-oz. Glass jar [1]	4°C	14 days to extraction and 40 days from extraction to analysis	Fill completely
Appendix IX Metals	SW-846 Methods 3050B/6010B 7000 series	1	4-oz. Glass jar [1]	4°C	6 months, 28 days for mercury	Fill to shoulder
Explosives	SW-846 Methods 8330 and 8332	1	4-oz. Glass jar [1]	4°C	7 days to extraction and 40 days from extraction to analysis	Fill completely

1- Teflon lined cap

TABLE 3-3
Required Containers, Preservatives, and Holding Times for Water Samples

Analysis	Analytical Preparation/ Method Number	No. of Containers	Sample Container	Preservative	Holding Time	Volume of Sample Collected
Appendix IX VOCs	SW-846 Method 5030B/ 8260B	3	Three 40-ml glass vials w/Teflon-lined cap	HCl to pH <2; Cool to 4ºC	14 days	Fill completely; no air bubbles
Appendix IX SVOCs	SW-846 Method 3510C/8270C	2	Two 1-liter bottles	Cool to 4ºC	7 days extraction/40 days to analysis	Fill to shoulder
Appendix IX PCBs	SW-846 Methods 3510C/8082	2	Two 1-liter bottles	Cool to 4ºC	7 days/ extraction/40 days to analysis	Fill to shoulder
Appendix IX Pesticides	SW-846 Methods 3510C/8081A	2	Two 1-liter bottles	Cool to 4ºC	7 days/ extraction/40 days to analysis	Fill to shoulder
Appendix IX Herbicides	SW-846 Methods 3510C/8051A	2	Two 1-liter bottles	Cool to 4ºC	7 days/ extraction/40 days to analysis	Fill to shoulder
Appendix IX Metals	SW-846 Methods 3010A/6010B and 3010A/7000 series	1	1-liter polyethylene bottle	HNO_3 to pH <2; Cool to 4oC	6 months (28 days for mercury)	Fill to shoulder
Explosives	SW-846 Methods 8330 and 8332	1	1-Liter Amber	Cool to 4ºC	7 days/ extraction/40 days to analysis	Fill to shoulder

3.2.5 Sampling Equipment Decontamination

All non-disposable sampling equipment will be decontaminated immediately after each use. The applicable SOPs for the decontamination of personnel and equipment from Volume 2 of the Master Project Plan are included with the FSP checklist.

3.2.6 Sample Designation

Sampling locations and samples collected during the investigation will be assigned unique designations to allow the sampling information and analytical data to be entered into the existing GIS Data Management system. The existing designation scheme for AFWTF and EMA will be followed by field personnel. The following sections describe the sample designation specifications.

3.2.6.1 Specifications for Field Station Location Data

Field station data is information assigned to a physical location in the field at which some type of sample is collected. For example, a soil boring that has been installed will require a name that will uniquely identify it with respect to other soil boring locations, or other types of sampling locations. The station name provides for a key in the database to which any samples collected from that location can be linked to form a relational database.

A listing of the location identification numbers will be maintained by the field team leader, who will be responsible for enforcing the use of the standardized numbering system during all field activities. Each station will be designated by an alphanumeric code that will identify the stations location by facility, site type, site number, station type, and sequential station number. Table 3-4 documents the scheme that will be used to identify field station data.

TABLE 3-4
Field Station Location Scheme

First Segment	Second Segment	
Facility, Station Type, Site Number	**Station Type**	**Station Number, Qualifier**
AAANNN	**AA**	**NNNA**
Facility: CG = Camp Garcia, AFWTF, EMA Station Type: S = Site W = SWMU O = Operable Unit U = UST A = AOC Site Number: 1 = SWMU 1 2 = SWMU 2 4 = SWMU 4 5 = SWMU 5 8 = SWMU 8 10 = SWMU 10 12 = SWMU 12 G = AOC G	Station Type: SB = Subsurface Soil Sample Location SD = Sediment Sample Location SS = Surface Soil Sample Location SW = Surface Water Sample Location GW = Groundwater Sample Location Station Number: Sequential Station Number Qualifier: S = Shallow D = Deep K = Background	

Notes:
"A" = alphabetic
"N" = numeric

3.2.6.2 Specifications for Analytical Data

Analytical data will be generated through sampling of various media at AFWTF and EMA. Each analytical sample collected will be assigned a unique sample identifier. The scheme used as a guide for labeling analytical samples in the field is documented below. The format that will be used for electronic deliverables from the analytical laboratory and the data validator is documented below.

3.2.6.3 Sample Identification Scheme

A standardized numbering system will be used to identify all samples collected during water, soil, and sediment sampling activities. The numbering system will provide a tracking procedure to ensure accurate data retrieval of all samples collected. A listing of the sample identification numbers will be maintained by the field team leader, who will be responsible for enforcing the use of the standardized numbering system during all sampling activities. Sample identification for all samples collected during the investigations will use the following format.

Each sample will be designated by an alphanumeric code that will identify the facility, site, matrix sampled, and contain a sequential sample number. QA/QC samples will have a unique sample designation. The general guide for sample identification is documented in Table 3-5. If one qualifier is pertinent to the sample identification (ID) but another is not, only the Table 3-4 applicable qualifiers will be used. A non-utilized character space does not have to be maintained.

TABLE 3-5
Sample Identification Scheme

First Segment	Second Segment		Third Segment
Facility, Station, and Site Number	**Sample Type**	**Sample Location + Sample Qualifier**	**Additional Qualifiers (sample depth, sampling round, etc.)**
AAANN	**AA**	**NNNA or NNAA**	**ANN or NNNN**
Facility: CG= Camp Garcia, AFWTF, EMA Station Type: S = Site W = SWMU O = Operable Unit U = UST A = AOC Site Number: 1 = SWMU 1 2 = SWMU 2 4 = SWMU 4 5 = SWMU 5 8 = SWMU 8 10 = SWMU 10 12 = SWMU 12 G = AOC G	Sample Type: DS = Direct Push – Soil DW = Direct Push – Water SD = Sediment SS = Surface Soil TB = Trip Blank EB = Equipment Blank FB = Field Blank FD = Field Duplicate Sample Location: 1. Station Samples (NNA) NNA – refers to sequential station number NNA – letter qualifier for Deep, Shallow, or Composite, sample (if applicable). 2. QC Samples (NNN) NNN - numbered sequentially for each type of blank (i.e., 1, 2, etc.) collected for that day's sampling NNN – refers to month of sampling event Sample Qualifiers: F = filtered sample P = duplicate sample K = background sample		Additional Qualifiers: 1. Monitoring Well Groundwater Sample (refers to sampling round for that well): R01 - Round 1 R02 - Round 2 R03 - Round 3 2. Direct Push Subsurface Sample (refers to depth of sample): Enter depth of top of sample interval 3. QC Samples NNNN - refers to day and year of sampling event

Notes:
"A" = alphabetic
"N" = numeric

3.2.6.4 Electronic Deliverable File Format

An offsite laboratory will analyze the Phase I RFI investigation samples and tabulate the results in an electronic format specified by CH2M HILL. The data validator will add data validation qualifiers to the table of analytical results. In addition to the hard copy data package deliverable, CH2M HILL will receive an electronic file from the data validator in a table format that will facilitate downloading into a database. Table 3-6 documents the format that will be used for electronic deliverables.

TABLE 3-6
Analytical Data Electronic Deliverable Format

Analytical data must be delivered in a format compatible with Microsoft Access 2.0 or 7.0		
Field Name	**Field Type**	**Description**
Sample_ID	A20	The CH2M HILL sample ID (taken from the Chain of Custody)
Sample_Analysis	A5	The analysis performed on the sample. We classify our samples into six main groups: VOA, SVOA, INORG, PEST, WCHEM, and FMETAL (for filtered samples).
Date_Analyzed	D	The date the sample was analyzed.
Date_Received	D	The date the sample was received in the lab.
Date_Collected	D	The date the sample was collected.
Lab_Sample_ID	A15	The lab sample ID.
Dilution_Factor	N	The dilution factor used, if applicable.
SDG_Number	A6	The SDG number.
CAS_Number	A6-A2-A1	CAS Number of the compound being analyzed (Note that the CAS number must consist of three number segments of defined length, separated by dashes).
Chem_Name	A50	The compound being analyzed.
Ana_Value	N	The analytical result.
Std_Qual	A5	The lab qualifiers, if any (e.g., U, UJ, B)
DV_Qual	A5	The data validation qualifier (e.g., J, R)
Units	A10	The unit of the result (e.g., MG/L)
Detect_Limit	N	The detection limit for the compound.
Method	A15	Analytical method used to analyze the sample fraction.

3.2.7 Surveying

Sampling locations at each SWMU and AOC will be horizontally located using a GPS following field activities. Elevations of monitoring wells will be surveyed to an accuracy of ± 0.01 feet. All survey data will be tied into the facility coordinate system. Latitude and longitude coordinates will also be presented.

3.3 Task 3: Sample Analysis and Validation

This task involves efforts related to the sample management and data validation. CH2M HILL will be responsible for tracking sample analysis and obtaining results from the laboratory. The analytical data generated during the SWMUs investigation field program will be validated by an independent data validation subcontractor according to EPA's *Functional Guidelines for Data Validation* (EPA, February 1994; EPA, September 1999).

3.3.1 Sample Analysis

All analyses of soil and groundwater will be conducted at a contracted laboratory that fulfills all requirements of the U.S. Navy's QA/QC Program Manual and EPA's Contract Laboratory Program (CLP) and SW 846 (for methods not covered by CLP). The laboratory must follow the scope of work prepared by the project team. A signed certificate of analysis will be provided with each laboratory data package, along with a certificate of compliance certifying that all work was performed in accordance with SW 846. All analyses will be performed following the highest level of EPA guidance. Analyses will include the proper ratio of field QC samples recommended by EPA guidance for the DQOs.

This task includes checking the data from the laboratory and converting it into an electronic format that can be readily incorporated into the GIS Data Management system for the AFWTF and EMA.

3.3.1.1 Field Quality Control Procedures

Quality control duplicate samples and blanks are used to provide a measure of the internal consistency of the samples and to provide an estimate of the components of variance and the bias in the analytical process. The QAPP provides details with regard to the number and frequency of field QC samples to be collected during the investigation.

3.3.1.2 Blanks

Blanks provide a measure of cross-contamination sources, decontamination efficiency, and other potential errors that can be introduced from sources other than the sample. American Society for Testing and Materials (ASTM) Type II water will be used for blanks. Four types of blanks can be generated during sampling activities: trip blanks, field blanks, equipment rinsate blanks, and temperature blanks.

One trip blank will be included in each cooler used for the daily shipment of VOC samples. If more than one cooler is being sent on a given day, all of the VOC samples should be placed in one cooler, if possible, to minimize the number of trip blanks needed. The trip blanks will be prepared before each sampling event, shipped or transported to the field with the sampling bottles, and returned unopened for analysis. Trip blanks will indicate if there is contamination during shipment to the field, from storage in the field, or from shipment from the field to the analytical laboratory.

One field blank will be collected per sampling event. If sampling events extend beyond 1 week (5 working days) or for windy and dusty field conditions, the number of field blanks should be increased. Field blanks are used to determine the chemical quality of water used for such procedures as decontamination and blank collection.

One equipment blank per sample medium will be obtained for each day of sampling. Equipment blanks will give an indication of the efficiency of decontamination procedures.

EPA has recently requested that a temperature blank be included in each cooler containing samples for analyses so that the laboratory can record the temperature without disturbing the samples. The temperature blank will be labeled, but will not be given a sample number nor will it be listed as a sample on the Chain-of-Custody (COC) form.

3.3.1.3 Duplicates

Field duplicate samples will be collected at a frequency of one field duplicate per 10 field samples per matrix. The locations from which the duplicates are taken will be selected randomly. Each duplicate sample will be split evenly into two sample containers and submitted for analysis as two independent samples.

3.3.1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike / matrix spike duplicate (MS / MSD) samples will be collected at a frequency of 1 MS / MSD for every 20 field samples collected. Analytical results of these samples indicate the impact of the matrix (water, soil, sediment) on extracting the analyte for analysis. MS / MSD samples give an indication of the laboratory's analytical accuracy and precision within the sample matrix. Data validators will use these results to evaluate the accuracy of the analytical data.

3.3.2 Data Validation

Analytical results will be validated by CH2M HILL subcontractors approved by the Navy. Data validators will use EPA Region II guidance (*Functional Guidelines*).

The hardcopy data packages will be reviewed by the subcontractor chemists using the process outlined in EPA's *Functional Guidelines for Evaluating Data* (EPA, September 1999). Areas of review will include (when applicable to the method): holding time compliance, calibration verification, blank results, MS precision and accuracy, method accuracy as demonstrated by laboratory confirmation samples (LCSs), field duplicate results, surrogate recoveries, internal standard performance, and interference checks. A data review worksheet will be completed for each of these data packages and any non-conformance will be documented. This data review and validation process is independent of the laboratory's checks and focuses on the usability of the data to support the project data interpretation and decision-making processes.

Data that are not within the acceptance limits will be appended with a qualifying flag, which consists of a single or double-letter abbreviation that reflects a problem with the data. The following flags will be used in the evaluation:

U - Undetected. Analyte was analyzed for but not detected above the method detection limit (MDL).

UJ - Detection limit estimated. Analyte was analyzed for, and qualified as not detected. The result is estimated.

J - Estimated. The analyte was present, but the reported value may not be accurate or precise.

R - Rejected. The data are unusable. (NOTE: Analyte/compound may or may not be present.)

Numerical sample results that are greater than the MDL but less than the laboratory reporting limit (RL) are qualified with a "J" for estimated as required by EPA's *Functional Guidelines* (EPA, 1994).

3.4 Task 4: Data Quality Evaluation

Analytical data will be collected during this investigation in the form of laboratory analytical results. The database will be populated with data validation qualifier results.

The data quality evaluation (DQE) is the quantitative and qualitative evaluation of overall trends in the project-specific database. The objective of the DQE process is to understand the effects of the overall analytical process on data usability to support project-specific data quality objectives (DQOs). The DQE includes an analysis of the effect of the specific sample matrix on the overall analytical process.

The DQE deliverable is a DQE Technical Memorandum (TM) that can be used by the project team to readily understand project-specific data usability. Topics to be addressed in the DQE TM include the following:

- *Potential blank contamination*—the effect on the usability of data for compounds detected in both the field or laboratory blank samples and the corresponding field samples
- *Laboratory performance*—evaluation of the recovery for blank spike samples such as the LCS, calibration criteria, etc.
- *Potential matrix interferences*—evaluation of the accuracy and precision for surrogates, spiked field samples, and duplicate field sample results
- *Assessment of PARCCs*—comparison of data validation findings with PARCCs (precision, accuracy, representativeness, comparability, and completeness)

This task also includes the evaluation of validated laboratory data and field-generated data. The data evaluation will include incorporation of historical data from the previous investigations, tabulation of the data, and generation of figures or tables associated with data (e.g., sampling location maps).

3.5 Task 5: Investigation Reports

A Draft Final Phase I RFI Report will be prepared for submittal to LANTDIV, NSRR, EPA, and PREQB. Based on the evaluation of the results presented in the Draft Final Phase I RFI Report, a Final Phase I RFI Report will be prepared. An outline of the draft Final Phase I RFI Report is presented in Exhibit 3-1.